Introduction & Methodology

Survey Purposes. This chapter analyzes results from a survey of visitors to Glacier National Park conducted in 2000. The primary reason for this survey was to collect information that will facilitate the engineering study and socioeconomic analysis of the Going-to-the-Sun Road rehabilitation project.

The content of this survey was different from prior visitor surveys in its emphasis on demographics, trip and expenditure characteristics, contingent behavior relative to

potential road restrictions due to rehabilitation improvements, and the sequencing and time spent at various park sites. Many prior visitor surveys have focused on the quality of the visitor experience.

This report focuses on a substantial set of survey questions that relate most directly to impacts of potential park road restrictions due to rehabilitation improvements. Results from other survey questions relating to travel characteristics and in-park visitor activity are described and evaluated in the later chapters of this report. The complete survey instrument is contained in Appendix A.

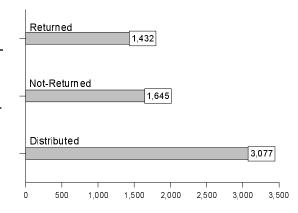


Figure 1: Surveys Distributed and Returned

Methodology. National Park Service staff hand-delivered the survey instrument and a return self-addressed envelope to 3,077 potential respondents who entered the east (St. Mary) and west (Apgar) gates to Glacier National Park. The survey was distributed over seven days between August 26, 2000 and September 1, 2000 proportion-

ately to the number of visitors who typically enter the park on each day at each entrance.

The survey results are developed from 1,432 responses that were returned in time to compile this analysis; this comprises a 46.5 percent response rate. Among the respondents, 20 percent are from Montana and 80 percent are from out-of-state.

The National Park Service received an additional sixty responses after data tabulation was complete and the analysis had begun. These responses were not included in the calculations; if they had been included, the response rate would have been 48.5 percent.

Since the survey was distributed so late in the season, the demographic characteristics of these visitors might be different from visitors surveyed earlier in the season. For example, this sample might include fewer school-age children and more adults traveling without children. Where data are available, comparative visitor demographics between this and prior surveys are provided. This analysis appears later in this section and in *Chapter 5, Priority Visitor Development Actions*.

Report Content. This chapter is divided into the following sections.

- Introduction & Methodology
- Overview of Key Survey Results
- Planning for Glacier Trips: Present, Past and Future
- Lengths of This Glacier Visit and Trip
- Travel Modes and Directions
- Glacier National Park Area Expenditures
- Road Restrictions and Alternatives
- Respondent Demographics
- Analysis of Nonresponses
- Survey Instrument & Tabular Survey Results (Appendix A)

The report uses some short-cut language or terms to communicate some of the major independent variables in the analysis.

Short-Cut Descriptors

Type of Visitor	Description
No comes	Respondents who would not come to the park if one side of Going-to-the-Sun Road were closed.
Uncertains	Respondents who do not know whether they would come to the park if one side of Going-to-the-Sun Road were closed.
Primary Visitors or Primaries	Respondents stating that the Glacier area was their primary (perhaps sole) destination on this trip.
Major Visitors or Majors	Respondents stating that the Glacier area was one of their primary destinations on this trip.
Side-Trippers	Respondents stating that their visit to the Glacier area was a side trip.
Day-Trippers	Respondents stating that they did not stay overnight in the Glacier area on this trip.
Advance Plan- ners	Respondents who planned this trip at least one month in advance.
Spontaneous Visitors	Respondents who planned this trip less than one month in advance.
Wait-and-Drive	Respondents who are willing to wait-and-drive for a fee rather than take a free tour bus.
Multi-Night Stayers	Respondents who planned to stay more than one night in the Glacier area.

Overview of Key Survey Results

Composite Visitor Characteristics. Using all of the survey research information, composites of a typical travel party and visitor to Glacier have been developed. The typical travel party averages 2.84 people and is traveling in a car with other family

Composite Visitor Characteristics

- Household Income substantially above average
- Educational attainment substantially
- above average
- Has visited Glacier National Park 12 times before
- Intends to return to the park annually
- Is traveling in a car with family members
- Is traveling with an average party size of 2.84

members. Relative to the U.S. population as a whole, Glacier visitors have substantially higher household incomes and education, have visited the park an average of twelve times before, and intend to visit an average of three times more in the next three years.

Logan Pass. The Logan Pass area is visited (or is a desired destination) by almost nine in ten park visitors. The area is visited by about 90 percent of the non-

Montana resident visitors — visitors who tend to be *advance planners* and *multi-night stayers* in the park area.

Going-to-the-Sun Road Restrictions. For two-thirds (66%) of the respondents, advanced knowledge regarding road restrictions to one side of Going-to-the-Sun Road would not deter their plans to travel to the park. Advanced knowledge about road restrictions would cause a fifteen percent decrease in park visitors and cause uncertainty about coming for an additional nineteen percent. Among non-Montana residents, the *no comes* and *uncertains* percentages were seventeen percent and 20 percent, respectively.

If you had known about the road restrictions... would you still have come...? (Q 26)

Response	% Responding
Yes	66%
No	15%
Don't know / Uncertain	<u>19%</u>
Total	100%

Worst-case visitor response to Going-tothe-Sun Road restrictions appears to be a 34 percent (15% + 19%) decrease in park visitors, including Montana residents. If we assume that half of the uncertain visitors would still come, the probable-case would be a 25 percent (15% +10%) decrease. It is important to note that park area spending was higher among those who would not have come knowing there would be road restrictions, because these respondents are more likely to be out-of-state visitors who spend more per day than in-state visitors.

Going-to-the-Sun Road Alternatives.

Knowing in advance that there were alternative ways of visiting the road-restricted Logan Pass area significantly reduced the potential reduction in park visits. For example, knowing that visitors could wait and drive or take a sightseeing bus to the area reduced the fifteen percent *no-comes* to seven percent and reduced the uncertains from nineteen percent to thirteen percent.

Knowing about road restrictions and the alternatives for handling them would reduce the worst-case visitor response from 34 percent

If you knew in advance that there would be a one-hour road construction delay...and a sight-seeing bus were available every 15 minutes, would you...? (Q27)

Response	% Responding
Take a sight-seeing bus	39%
Wait-and-drive	31%
Come but not visit Logan	Pass 10%
Not visit the park	7%
Don't know	<u>13%</u>
Total	100%

to 20 percent who would not come, while the probable-case 25 percent reduction would be cut almost in half to fourteen percent.

Effective marketing communications could reduce the probable-case negative visitor response even further. The survey leads with a blunt statement about road restrictions to the park's most visited area and then introduces ways of handling the restrictions. Communicating the park's commitment to road improvement and commitment to providing desirable, alternative access to the area could reduce the *no-comes* and *uncertains* even further. For example, informational and marketing materials could state, "During road improvements in the Logan Pass area, visitors will be able to take sightseeing buses or schedule other times to drive their vehicles to the area."

Fees. Introducing a fee to drive and having a free sightseeing bus does not impact further the worst-case or probable-case significantly, and it does not impact the number who

Probable-Case Visitor Reduction due to Road Restrictions (Q26 & Q27)	
25%	
14%	

would wait-and-drive. One-third would pay a fee to drive, and one-third would take a

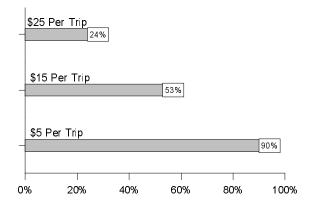


Figure 2: Percent Willing to to Pay to Drive Vehicles on Going-to-the-Sun Road at \$5, \$15, or \$25 per Trip

free sightseeing bus. Those who prefer to drive are also more likely to be *advance* planners and *multi-night stayers*.

Willingness to Pay. A \$5 drive fee per trip is acceptable to most who prefer (or demand) driving to the Logan Pass area — 90 percent said "yes" to \$5 per trip fee, including 95 percent of the three-plus night stayers. Clearly, a \$15 fee would significantly reduce the number who would drive to the area — only 53 percent would pay \$15 per trip. At \$25 per trip, only 24 percent would be willing to pay a drive fee.

Given their predisposition to drive for a \$5 fee instead of taking a free tour bus, it is likely that anything more than a \$5 fee would significantly reduce their likelihood of coming to the park.

Respondents Most Likely to Visit with Road Restrictions. Those who are most likely to visit Glacier even if they know ahead that travel over Going-to-the-Sun Road might be restricted are those that (a) include Glacier as their primary destination, (b) have planned to stay in the Glacier area for three or more days, (c) are likely to spend less money per day, and (d) are more likely to be Montana residents. There are no statistically significant correlations with respect to average trip length, household income, or age of the respondent.

If road construction or road congestion limited traffic...would you prefer to...(Q28)

Response	% of Responses
Pay a fee and drive	34%
Take a free tour bus	33%
Not visit the Road but visit t	the park 13%
Not visit the park	9%
Other	2%
Don't know	<u>9%</u>
Total	100%

Respondents Least Likely to Visit with Road Restrictions. Those who are most likely to cancel, avoid, or postpone a trip Glacier National Park, knowing ahead about travel restrictions are those who (a) are shorter-term visitors (planning two or less days in the Glacier area), (b) have included the park as a side trip rather than their primary destination, (c) tend to spend more money per day, and (d) are more likely to be from outside of Montana.

Planning for Glacier Trips: Past, Present, and Future

Q1 – How many months in advance did you plan this trip to Glacier National Park?

Defining advance planning as planning at least one month ahead, three-fifths (61%) of the responding park visitors clearly advanced, planned their trip to Glacier. Twenty percent of the respondents planned their trip six months or more in advance including four percent who planned it a year or more in advance. *Advance planners* tend to be more prevalent among visitors considering Glacier one of their primary destinations (Glacier *majors*) and among those spending multiple nights in the park.

Two-fifths (39%) — largely Montana residents — did not advance plan and can be considered more spontaneous visitors, that is, they planned a trip less than one month in advance. Only seventeen percent of the Montana resident visitors could be considered advance planners for this trip. The more spontaneous visitors were more prevalent among west entrants, side-trippers, and day-trippers.

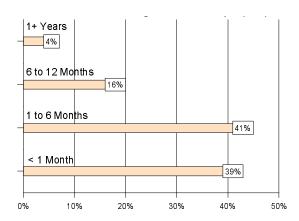


Figure 3: Advance Planning, This Trip (Q1)

Q30 – On this trip, was Glacier National

Park a primary destination, one of your primary destinations or a side trip or a pass through to another destination?

Two-fifths (38%) of the responding visitors — again largely Montana residents — can be considered Glacier *primaries*, that is visitors who say Glacier was the primary destination of this trip. Glacier *primaries* also tend to be *spontaneous visitors* and visitors who plan to stay six-plus nights in the area. Glacier *primaries* also tend to be among those for whom road restrictions would not be dissuading.

Another two-fifths (41%) said that Glacier was one of their primary destinations, or a major destination of this trip. Glacier major visitors were also more likely to be *advance planners*, one to five night visitors, and those who uncertain about their response to road restriction impacts.

Glacier as Type of Destination (Q30)

Response	% of Total
Primary destination	38%
One of your primary destination	ns 41%
A side trip	21%
Total	100%

Visits in Last Three Years, Prior to this Trip (Q31)

Sample	Average # of Vis	sits
All		9
Non-Montanans		4
Non-Montanans &	Non-Canadians	3
Montanans only		16

One-fifth (21%) regarded their Glacier visit as a side trip. Glacier *side-trippers* were more likely to be *spontaneous visitors*, *day-trippers*, one to two night visitors, those unlikely to come to the park with road restrictions, and non-Montana residents.

Q31 – Before this trip, how many other times did you visit Glacier National Park in the past three years?

During the past three years, respondents visited Glacier an average of nine times which equates to an average of three times per year prior to this trip. Among non-Montana visitors, the average was four; among the non-Montana and non-Canadian visitors, the average was three; among Montanans, the average was sixteen. Since many Canadian visitors

reside close to the park, their trip characteristics are more like Montanans than other out-of-state visitors.

For 58 percent of the visitors, this was their first trip to Glacier within the last three years; 39 percent had made one or more trips within the last three years.

Q33 – How many total trips have you made to Glacier National Park in your lifetime, including this trip?

Visitors have taken an average of twelve trips to Glacier National Park, including their current trip. Among the non-Montana visitors, the average was six trips; among the non-Montana and non-Canadian visitors, the average was four trips; among the Montana visitors, the average was 46 trips.

As would be expected, frequent visitors — recent and lifetime — are more likely to be Montana residents, and correspondingly, tend to be *spontaneous visitors* and *day-trippers*. Interestingly, these are also people for whom road restrictions would not be dissuading.

First time visitors and non-recent visitors tend to be *advance planners*, non-Montana residents, and multi-night visitors. They are more likely to be unsure of the impact of road restrictions.

These average statistics include 44 percent for whom this was their first trip to the park. In 1991, a survey of visitors to Glacier found that 59 percent were visiting

Average Lifetime Trips Including this Trip (Q33)

Sample Avera	ge Trips
All	12
Non-Montanans	6
Non-Montanans & Non-Canadians	4
Montanans Only	46

Glacier for the first time (*Visitor Services Project – Glacier National Park*, Cooperative Park Studies Unit – Visitor Services Project – Report 35, Margaret Littlejohn, University of Idaho, March 1991; henceforth, *The 1991 Visitor Survey*). Similarly, a 1994

survey of visitors to Glacier also found that 59 percent were visiting for the first time (The Glacier National Park Visitor Use Study, Research Report 36, Theron Miller & Stephen McCool, Institute for Tourism and Recreation Research, University of Montana, August 1994; henceforth, *The 1994 Visitor Survey*.)

Relative to all visitors, the first time visitors tend to (a) be on longer trips (three

Average Additional Trips During Last Three Years (Q32)

Sample	Average # of Trips
All	9
Non-Montanans	3
Non-Montanans & Non-C	anadians 3
Montanans Only	21

to four weeks), (b) have higher household incomes, (c) have more education and, (d) be from outside of Montana. Those with a college degree and those with a professional, managerial, or technical job have taken slightly more trips than average.

A recent nationwide survey (*NPS Comprehensive Survey of the American Public*, September 2000) of the general public found that 32 percent had visited a unit of the National Park system within the last two years and 68 percent had not.

Q32 – How many additional times do you plan to visit Glacier National Park in the next three years?

Sixteen percent of the responding visitors plan no additional trips to Glacier, 45 percent plan one or more additional trips and 39 percent are uncertain.

Average Additional Trips in the Next Three Years (Q32)

Average # of Trips
16%
45%
<u>39%</u>
100%

Visitors plan to take an average of nine additional trips to Glacier in the next three years. Among the non-Montana visitors, the average number of additional trips was three; among non-Montana and non-Canadians, the average was also three; among Montana visitors, the average was 21 trips. These average statistics include sixteen percent who expect to take no additional trips.

This data suggests that many new or first-time visitors to Glacier are likely to become repeat visitors. Efforts to attract new visitors will have a multiplier effect on visitation for years to come.

Q12 – Do you plan to make a return visit to Glacier National Park in the fall of 2000, the winter of 2000 or the spring of 2001?

Three-fifths (58%) of the responding visitors have no plan to return to the park before summer 2001 and nineteen percent are uncertain whether they will return or not. The

Return Visits in Off-Season (Q12) (Multiple "yes" responses allowed)

Response	% of Respondents
No	58%
Yes, Fall of 2000	16%
Yes, Winter of 2000	9%
Yes, Spring of 2001	18%
Don't Know	19%

remaining 23 percent plan to return in the offseason; many of these will return more than once.

Respondents who say they plan to return in the 2000/2001 off-seasons are more likely to be Glacier *primary visitors*, *spontaneous visitors*, *day-trippers*, and correspondingly, Montana residents.

Among the non-Montana residents, 70 percent say they will not return to Glacier in the 2000/

2001 off-season, 66 percent currently have no plans to return in the next three years, and 43 percent have no plans to return. Road restrictions do not appear to play a role in stated intentions to return to Glacier, but they do seem to play a role in uncertainty about returning in the next three years.

Q34 – Did you plan to visit Yellowstone National Park on this trip?

Twenty-three percent of the Glacier visitors also planned to visit Yellowstone National Park on the same trip. Among those from outside of Montana, 28 planned a trip to Yellowstone National Park. This information suggests that linked marketing and visitor information might be effective.

Lengths of this Glacier Visit and Trip

Q7 – From leaving to returning home, how many days did you expect this trip to be?

The average expected trip length among all visitors was twelve days. Among non-Montana visitors, the average trip length was fourteen days; among non-Montana and Non-Canadian visitors, the average trip length was fifteen days; among Montanans, the average trip length was three days.

Average Trip Length (in Days) (Q7)

Sample Average # of	of Days
All	12
Non-Montanans	14
Mon-Montanans & Canadians	15
Montanans	3

One-fifth (20%) of all respondents expected this Glacier visit and trip to require only one to two days, while another one-fifth (19%) expected a three to six day trip. One half (50%) of all respondents were clearly on longer trips, with 22 percent on two week and longer trips and 28 percent on seven to thirteen day trips. Ten percent said they left home without a set expectation of this trip's length. As would be expected, the one to two day travelers to the Glacier area also tend to be Montana residents, day-trippers, more spontaneous visitors and those for whom Glacier was the primary destination.

Not surprisingly, the expected trip length is highly correlated with length of advance planning -- i.e., increased advanced planning signals longer trips. Number of nights at Glacier is correlated with expected trip length, but with an interesting sidebar—

i.e., six-plus night visitors are especially prevalent among seven to thirteen day travelers, more so than among fourteen-plus day travelers. Correspondingly, respondents for whom Glacier is the primary destination are more likely to be seven to thirteen day visitors; respondents for whom Glacier is a major destination are more likely to be among the fourteen-plus day travelers.

Average Days Spent in Park Area (Q10) Sample # of Days All 4 Non-Montanans 4 Non-Montanans & Non-Canadians 4 Montanans 2

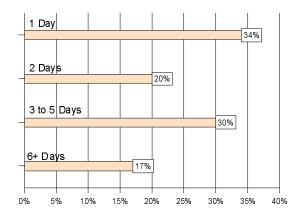


Figure 4: Days in the Park Area (Q10)

Q10 – How many days did you spend in Glacier National Park area during this trip?

(The Glacier National Park area is defined in the survey instrument to include Whitefish, Columbia Falls, Kalispell, Flathead Lake, and Browning.) Among all visitor respondents, the average number of days spent in the park area was four. Among non-Montana residents and among non-Montanan & non-Canadian residents, the average number of days was also four. Among Montanans, the average number of days was two.

One-third (34%) of the responding visitors were one-day visitors to the park area, 20 percent were two-day visitors, 30 percent were three to five-day visitors, and seventeen percent were visitors for six or more days.

Again, the Montana resident impact is expectedly present in the one-day visitors, but with a twist. The one-day visitors were also likely to be among respondents making the park a side trip, as opposed to it being the primary desti-

nation as is more typical of Montana residents. Accordingly, *spontaneous visitors* and, of course, *day-trippers* (those not spending a night) are also likely to be among the one-day visitor. Consistent with the earlier data, longer-term trip planners and *multi-night stayers* in the park (of course) are also likely to be among the multi-day visitors to the park area.

It is interesting to note that those who are unwilling or uncertain about coming to the park during road restrictions are more likely among the oneday visitors than the multi-day visitors.

Q11 – How many nights did you spend in the Glacier National Park area during this trip?

Among all visitor respondents, the average number of nights spent in the park area was four. Among non-Montana residents, the average number of nights was also four; among non-Montanans and non-Canadians, the average was five; among Montanans, the average number of nights was three.

The data regarding nights spent in the park area parallel the data regarding days spent in the park area. One-third (32%) did not spend a night in the park area; 30 percent spent one or two nights; 21 percent spent three to five nights and fourteen percent spent six or more nights.

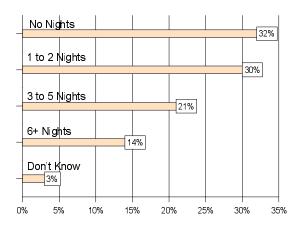


Figure 5: Nights in the Park Area

Average Nights Spent in Park Area (Q11)		
Sample # d	of Nights	
All	4	
Non-Montanans	4	
Non-Montanans & Non-Canadia	ans 5	
Montanans	2	

The cross-tabulation analysis of the nights spent data is essentially a repeat of the days spent data. It appears the road restrictions would have the most impact on *day-trippers* — the one day, zero night visitors who are typically Montana (perhaps local) residents.

Q21 – If more services and facilities were offered, would you extend your visit to the Glacier National Park area?

One half of the responding visitors (48%) said "no," they would not extend their stay if more services and facilities were offered in the park area. One-fifth (22%) said "yes," they would extend their stay, and

Extend Stay if more Services & Facilities were Offered? (Q21)

Response	% of Respondents
Yes	22%
No	48%
Don't Know	<u>30%</u>
Total	100%

almost one-third were uncertain about the impact of area improvements upon their length of stay. There was no statistical difference between Montana and non-Montana resident respondents.

Those who said "no" were more likely to be Glacier *primaries* and visitors extending their stay for six or more nights in the park area. Those who said "yes" were somewhat more likely to be among the Glacier *majors* and among those who would not

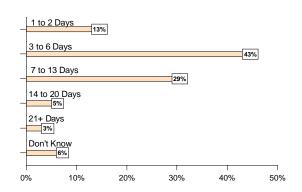


Figure 6: Days in Montana (Q9) (Non-Montana Respondents only)

come if there were road restrictions. Those who said "don't know" if area improvements would extend their visit were more likely to be among Glacier *side-trippers* and those uncertain of the impact of road restrictions.

Q8 – Are you a resident of Montana? Q9 – If no, how many days did you plan to spend in Montana during this trip?

Eighty percent of the responding visitors were not Montana residents. Non-Montana visitors planned to spend an average of eight days in Montana. Non-Montana and

non-Canadian visitors also expected to spend an average of eight days in Montana.

Almost three-fourths planned to stay in Montana for three to six days (43%) or seven to thirteen days (29%). Extrapolating from the Q10 data, almost three-fourths of their Montana days were spent in the Glacier area.

Similar to previous data, those who would not visit the park with road restrictions also tend to be among the short-term (one to two day) visitors.

Travel Modes and Directions

Q3 – On this trip, did you arrive by plane or will you depart by plane?

Arrival by Airplane (Q3)

Response	% Responding
Yes	29%
No	<u>71%</u>
Total	100%

Twenty-nine percent of the responding visitors traveled to and/or from the Glacier area via airplane, including 36 percent of the non-Montana residents but only two percent of the Montana residents.

Air travelers were more likely to be among the Glacier major visitors, advance plan*ners*, and those staying six or more nights in the Glacier area.

Q36 – What type of vehicle did you drive on this trip?

Fifty-seven percent traveled in a car, eighteen percent in a sports utility vehicle, twelve percent in a truck, four percent in a motor home, and one percent on a motorcycle. Eight percent used other transportation; the most frequent "other" remark was minivan.

Visitors who reside in Montana were more likely to travel in a sports utility vehicle (24%) or a

truck (18%) than non-Montanans. In the 1994 Visitor Survey, 86 percent traveled in a car and six percent traveled in a "recreation vehicle." Use of a car was more typically among advance planners and non-Montana residents and among those uncertain about the impact of road restrictions. Use of a sports utility vehicle or truck was more likely among the more spontaneous visitors and Montana residents.

Q5 – On this trip to the Glacier
National Park area, from which
direction did you travel? (The
Glacier National Park area
includes Whitefish, Columbia
Falls, Kalispell, Flathead Lake,
and Browning.)

Q6 – When you left the Glacier National Park area, which way did you travel?

Travel Routes (Q5 & Q6)		
	Traveling	Traveling
Route	to Glacier (Q5)	From Glacier (Q6)
US 2	54%	52%
US 89	30%	29%
MT 83	9%	11%
US 93	<u>7%</u>	<u>8%</u>
Total	100%	100%

for This Trip (Q36)		
Type%	of Sample	
Car	57%	
Sports Utility Vehicle	18%	
Truck	12%	
Motor Home	4%	
Motorcycle	1%	
Other	<u>8%</u>	
Total	100%	

Type of Vehicle Used

More than one-half of the park area visitors used US 2; about 30 percent used US 89; about ten percent used MT 83 and about eight percent used US 93.

Use of US 2 from the west and to the west was more likely among Glacier *primary visitors*, *short-term planners*, *day-trippers* and visitors staying six or more nights in the area, and Montana residents. Use of US 89 from the south was more likely among Glacier major visitors, long-term planners, multi-night visitors, and those not saying they wouldn't come with road restrictions. Use of US 89 to the south was likewise higher among the multi-night visitors.

Respondents using the north routes, especially US 89 from the north were more likely to be among the *side-trippers*, *day-trippers*, non-Montana residents (likely Canadians), and those who would not come to/through Glacier with road restrictions. The data are similar for use of US 89 and US 93 to the north.

Glacier National Park Area Expenditures

Q15 – During your time in the Glacier National Park area on this trip, please estimate your average daily expenditures for you and your group.

The surveyed respondents estimate their daily park area expenditures average \$200, with Montana residents estimating \$110 expenditures and non-Montana residents

Average Daily Expenditures of Travel Group (Q15)

Expenditure	Avg. Am	ount-
Food/Beverage in Grocery	Store \$	19
Restaurant & Bar	\$	48
Gasoline and Automobile	\$	27
Lodging and Camping	\$	99
Recreation Activities	\$	23
Gifts	\$	35
Other, Excluding Airfare	\$_	42
CalculatedTotal	\$2	293
ReportedTotal	\$2	200

estimating twice that amount, or \$221. Non-Montana and non-Canadian visitors estimated daily expenditures to total \$228.

It is interesting to note that actual total daily expenditures could be 50 percent higher than the \$200 total estimate. When adding the seven individual expenditure entries, the calculated total is \$293.

 Food and beverage expenditures tend to be higher among side-trippers, more spontaneous visitors and six month-plus advance planners.

- Restaurant and bar expenditures tend to be higher among advance planners, multi-night visitors and non-Montana residents.
- Gasoline and auto expenditures tend to be higher among advance planners, six-plus night stayers and non-Montana residents.
- Lodging and camping expenditures tend to be higher among Glacier primary visitors and Glacier major visi-

tors, advance planners, multi-night stayers, and non-Montana residents.

Estimated Expenditures &
Calculated Expenditures (Q15)

	Respondent Estimated	Respondent Calculated
Туре	Total	Total
All	\$200	\$293
Non-Montanans Non-Montanans	\$221	\$318
& Non-Canadia	ans \$228	\$323
Montanans	\$110	\$184

- **Recreation activities** expenditures tend to be higher among *side-trippers*, advance planners, multi-night stayers, and non-Montana residents.
- **Gifts** expenditures tend to be higher among *side-trippers*, *multi-night* (especially three-plus night) *stayers*, *advance planners*, and non-Montana residents.
- Other items and service expenditures tended to be higher among Glacier primary visitors and Glacier major visitors, six+ month advance planners, three-plus night stayers, non-Montana residents, and those who would be dissuaded by road restrictions.

These individual category expenditure trends translate almost directly into total expenditure trends. Total expenditures tend to be higher among Glacier *primary visitors* and Glacier *major visitors*, *advance planners*, *multi-night stayers*, and non-Montana residents. If we use the summed estimates, we also find that total expenditures tend to be highest among those who would be dissuaded by road restrictions and lowest among those uncertain about their impact.

Road Restrictions and Alternatives

Q23 – Did you stop in the Logan Pass area during your visit?

Eighty-five percent of the responding visitors stopped in the Logan Pass area, while thirteen percent did not stop and did not plan to stop; only two percent wanted to stop but could not because of parking unavailability. Logan Pass area visitors were elevated among Glacier *major visitors*, *advance planners*, *multi-night stayers* and non-Montana residents

Q26 – If you had known in advance of your trip that one side of Going-to-the-Sun Road would be closed and one side would be open so you could reach Logan Pass, would you still have come to Glacier National Park?

Two-thirds (66%) said they would have still come to Glacier even if they knew of the road restrictions, fifteen percent said they would not have come; and nineteen percent were not sure.

The respondents who would still have come were more likely to be Glacier *primary visitors*, staying more than three nights in the Glacier area and Montana residents. Those who would not have come were more likely to be from outside of Montana, planning fewer days in the Glacier area and *side-trippers*.

Q27 – If you knew in advance that there would be a one-hour road construction delay driving to Logan Pass and a sightseeing bus was available every fifteen minutes would you . . .Take the sightseeing bus if it were free? ... Take the sightseeing bus if it cost \$5 per person, round trip? ... Wait one hour and then drive to Logan Pass? ... Come to the park but not visit Logan Pass? ... Not visit the park? Don't Know?

One-third of respondents would wait and drive their car, while 39 percent would take a free, every fifteen- minute sightseeing bus (including twelve percent who would pay \$5 for the bus). Only seven percent would not come to the park with the driving delay, while ten percent would come but would skip Logan Pass, and thirteen percent are uncertain what they would do.

It appears that seeing these alternative means for handling the road restrictions can ameliorate many respondents' negative reaction to the road restrictions. Specifically, without these alternatives, fifteen percent said they would not have come to the park

and nineteen percent were not sure. With these alternatives, the percent saying they would not come dropped to seven percent and the *uncertains* dropped to thirteen percent.

Free Sightseeing Bus. Those who would take the bus for free were also likely to be those who would come with road restrictions and those saying they do not know if they would come with road restrictions.

Sightseeing Bus for a Fee. Those willing to pay for the sightseeing bus were also likely to be Glacier *primary visitors* and Glacier *major visitors*, *advance planners*, and those who would come with road restrictions.

Wait and Drive. Respondents who would wait one hour and drive were likely to be advance planners and with travel parties who plan to stay three nights or longer in the Glacier Area.

Come but not Visit Logan Pass. Respondents who would still come to Glacier but not visit Logan Pass were more likely to be Montana residents, Glacier *primary visitors*, and *spontaneous visitors*.

Not Visit the park. Those who would not visit the park were more likely to be *side-trippers* or *day-trippers*.

Q28 - If road construction or road congestion limited traffic on Going-to-the-Sun Road, would you prefer to pay a fee to drive your own vehicle on Going-to-the-Sun Road, take a free tour bus on Going-to-the-Sun Road, not visit Going-to-the-Sun Road, not visit the Park, other, or don't know?

As might be expected from the foregoing data, one-third would drive their own vehicle even with a fee, while one-third would take the free tour bus. Thirteen percent would visit the park but skip Going-to-the-Sun Road, while nine percent would skip the park (and that is up two points from Q27 but still six points below the original Q26 *no comes*). The cross-tab analyses here are virtually identical to those for Q27.

Q29 – Would you be willing to pay \$5, \$15, or \$25 to drive your own vehicle one way on Going-to-the-Sun Road?

Three versions of this question were printed. Each respondent saw a question with a single dollar amount. One-third of the respondents were asked if they would pay \$5, one third were asked if they would pay \$15, and one-third were asked if they would pay \$25. This technique was used is to get a clear understanding of willingness to pay. Only 399 surveyed visitors responded to this question, but their responses are clear. Ninety percent would pay \$5 to drive their own car one way on Going-to-the-Sun Road, but only 53 percent would pay \$15; and only 24 percent would pay \$25.

The \$5 payers were elevated among Glacier *primary visitors* and Glacier *major visitors*, short-term planners, and three-plus night stayers. The \$15 payers were elevated among Glacier *primary visitors* and *side-trippers*, one to five night *stayers*, and non-Montana residents.

Respondent Demographics

Respondents from U.S. In Descending Frequency

Montana
California
Washington
Minnesota
Wisconsin
Oregon
Texas
Michigan
Pennsylvania
Florida

Residence. Ninety percent of the respondents were from the United States and ten percent were from another country. Montana residents comprised 20 percent of all respondents and 21 percent of respondents from the United States.

These proportions are similar to the *Glacier National Park* 1996 Visitor Survey (Miller, Freimund & McCool, University of Montana, School of Forestry, July 1997; henceforth, *The 1996 Visitor Survey*) where between fifteen and 20 percent were from Montana. In the 1994 Visitor Survey, eleven percent of the summer visitors were from Montana.

Among the U.S. respondents, 21 percent were from Montana and 79 percent were from other states. A list of states in descending order of frequency appears in the table to the left. This list is similar to the 1991 Visitor Survey where the visitors to Glacier were from the following top ten states in descending order: Montana, Washington, Minnesota, California, Illinois, Florida, Texas, Utah, Wisconsin, and Oregon. This list is also similar to information provided by the Insti-

tute for Tourism and Recreation Research (U. of Montana) which reports summer visitors to Montana from the following states, in decreasing frequency: Washington, California, Idaho, Colorado, Wyoming, Oregon, Minnesota, Utah, Texas, North Dakota, Michigan, Wisconsin, Illinois, and Arizona.

Among the ten percent from another country, 68 percent were from Canada, which abuts Glacier National Park, and 32 percent were from eleven other countries. Other countries in descending frequency were United Kingdom, Germany, Belgium, Switzerland, Australia, and Italy. The list of foreign countries is nearly identical to those where Travel Montana advertises, which includes the United Kingdom, Germany, France, Belgium, the Netherlands, Italy, Japan, and Taiwan.

Travel Party Size. The average travel party size was 2.83 people. Among non-Montanans, the average size was slightly lower (2.74 people) than Montanan travel parties (3.16 people). Among those who would come to Glacier with road restrictions, the average travel party size was (2.86).

The 1991 Visitor Survey reported an average travel party size of 3.7 people. The 1994 Visitor Survey reported an average travel party size of 2.7 people for summer visitors.

Travel Party Relationship. Sixty-two percent of the respondents traveled with members of their family, fifteen percent traveled with friends and an additional ten percent were traveling with both family and friends. Only two percent were traveling with an organized group or tour and eight percent were traveling alone. The 1991 Visitor Survey and the 1996 Visitor Survey also found that most travel parties consisted of family members.

Respondents from Outside U.S. in Descending Frequency

Canada
United Kingdom
Germany
Belgium
Switzerland
Australia
Italy

Average Travel Party Size (Q39)

All Respondents 2.83 people Non-Montanans 2.73 people Montanans 3.16 people

Travel Party Relationship (Q38)

Туре	% of Sample
Family	62%
Friends Only	15%
Family & Friends	10%
Alone	8%
Other	3%
Organized /Guided	Tour <u>2%</u>
Total	100%

Travel Party Demographics. The most typical Glacier travel party contains a family comprised of two adults and one child.

Adults 46 to 64. Fifty-four percent of all travel parties contained at least one adult between 46 and 64 years old. For those with adults in this group, the average number was 1.9. 24 percent of all travel parties contained only adults between 46 and 64.

Travel Party Demographics (Q39)		
Characteristic	% of Total	
Travel Party Contained at Least One Person Who was:		
Less than 6 years 6 to 16 years old 17 to 24 years old 25 to 45 years old 46 to 64 years old 65 or more years old	6% 12% 10% 39% 54% d 22%	

Adults 25 to 45. Thirty-nine percent of all parties contained an adult between 24 and 45. For travel parties with an adult in this age group, the average number was also 1.9. Fourteen percent of all travel parties contained only adults in the age group.

Seniors. Twenty-two percent of all travel parties contained at least one senior who was 65 or older. For parties with a senior, the average was 1.7 people. Nine percent of all travel parties contained seniors only.

Young Adults – 17 to 24. Ten percent of all travel parties contained at least one person between seventeen and 24 years old.

Children. Twelve percent of all travel parties con-

tained at least one person between six and sixteen years old and six percent contained pre-schoolers who were six years old or less.

This data is particularly useful in understanding the portion of the visitor market that might be attracted to activities geared towards families, adults only, and senior travel parties.

Respondent Age. The respondents average 50 years old. Among non-Montanans, the average age was also 50 years. Montana resident respondents averaged 47 years. Respondents who were over 65 comprised seventeen percent of the entire sample, and thirteen percent of Montana residents. Respondents who were under 25 comprised four percent of all respondents and seven percent of Montanan respondents.

Travel Party Contained Only People Who Were:

17 to 24 years old	2%
25 to 45 years old	14%
45+ years old	9%

In the 1996 Visitor Survey, the average respondent age was 43 years. In the 1994 Visitor Survey, the average respondent age was 47 years for summer visitors. In the 1991 Visitor Survey, the average respondent age was 44 years.

1999 Household Income. Respondents were asked their 1999 household income. This data reflects information from respondents only. If the travel party contained more than one household only the respondent's household information is reflected.

Household incomes among respondents were quite high relative to the general popu-

lation. Twenty-six percent report household incomes of \$100,000 or more, including thirteen percent who report household incomes of \$150,000 or more; among Montana residents, five percent earned a household income of more than \$150,000.

High-income households (\$100,000-plus) stayed longer in the Glacier park area, have larger travel parties, and are more willing to pay a fee to travel Going-to-the-Sun Road. They are just as likely

1999 Household Income (Q42)			
	Survey	US Census	
Income Group	% ofTotal	% of Total	
Less than \$25,000	11%	32%	
\$25,000 to \$50,000	23%	28%	
\$50,000 to \$75,000	22%	18%	
\$75,000 to \$100,000	18%	10%	
\$100,000 +	<u>26%</u>	<u>12%</u>	
Total	100%	100%	

to come to Glacier if there are road restrictions as lower household income visitors.

The U.S. Bureau of the Census reports (*Money Income in the United States: 1999*) that in the United States, only twelve percent of all households earned a household income of \$100,000 or more in 1999. Eighteen percent of the respondents report household incomes between \$75,000 and \$100,000; in the U.S., ten percent earn incomes in this range. Among respondents, 22 percent earned household incomes between \$50,000 and \$75,000; in the U.S., eighteen percent earn incomes in this range. Among respondents, 23 percent report incomes between \$25,000 and \$50,000; in the U.S., 28 percent earned incomes in this category. While only eleven percent of respondents earned income of \$15,000 or less, 32 percent of households in the U.S. earn incomes in this range.

The median 1999 household income among all households in the U.S. was \$40,816. Since respondents were asked a multiple-choice question regarding income, a comparable figure from the survey research is not available.

Higher income households tend to be from outside of Montana, plan to spend fewer nights in the Glacier area, have planned their trip relatively quickly (one month or less), and have an advanced college degree.

Respondent Educational Attainment (Q43)

	Respondents	US Census
Education	% of Total	% of Total*
Less than High School	2%	15%
High School Graduate	24%	51%
College Graduate	41%	25%
Advanced College Degre	e <u>33%</u>	<u>9%</u>
Total	100%	100%
* All adults 25 and over		

Respondent Educational
Attainment. Each respondent
was asked his or her highest
educational attainment. Respondents have significantly more
education than the average of all
adults over 24, as reported by
the U.S. Census Bureau, Educational Attainment In the United
States, March 2000. Among
respondents, 74 percent
reported having a college degree

or more. In contrast, among all adults over 25 in the U.S., only 34 percent report having a college degree or more. Only two percent of the respondents report having less than a high school education; in the U.S., fifteen percent report having less than a high school education.

There was no statistically significant relationship between education and a willingness to visit the park if there were road restrictions.

These visitor statistics are similar to respondent demographics compiled in the 1996 Visitor Study that found the average years of the respondent's education to be between 16.2 and 16.6 years. The 1994 Visitor Survey reported the average level of respondent education was fifteen years.

Analysis of Nonresponse

To measure for potential nonresponse bias, NPS staff recorded several pieces of information about each visitor that was stopped to request participation in the survey. The information included the following: date distributed, location (east or west side), willingness to participate, number of people in the travel party, type of vehicle, and the

gender of person approached. Staff asked each visitor for their home zip code or country of residence if outside of the United States.

In an effort to detect nonresponse bias, this section compares information about visitors who were approached to participate in the survey, with visitors who expressed willingness to participate and the visitor respondents.

Willingness to Participate. Approximately ninety percent of the people approached by National Park Service staff indicated they were willing to participate and took a survey questionnaire. As described in an earlier section, about one-half of those willing to participate actually returned a survey questionnaire.

Entrance Gate. The survey design called for 70 percent of the surveys to be distributed on the west side and 30 percent on the east side, since this is generally consistent with historic visitor entry counts during prior months of August.

In the field, approximately 66 percent were distributed on the west side and 34 percent on the east side. Returned surveys included 68 percent from the west side and 32 percent from the east side.

Travel Party Size. There were an average of 2.5 people in travel parties who were approached by National Park Service staff and an average of 2.5 people in parties who said they would participate in the survey. The average travel party size of respondents was 2.8 people. One and two person travel parties were slightly less likely to respond than larger travel parties.

Type of Vehicle. The type of vehicle driven by travel parties approached by National Park Service staff and responding travel parties was very

Entrance Gate			
	West	East	
Planned	70%	30%	
Distributed	66%	34%	
Returned	68%	32%	

Average Travel Party Size			
Travel Party	Avg. People		
Approached	2.5		
Willing-to-Participat	e 2.5		
Responding	2.8		

Type of Vehicle Driven			
		Willing to	All
Vehicle	—— All—	Participate	Respondents
Car	56.4%	56.2%	56.8%
SUV	21.7%	22.3%	18.5%
Truck	13.0%	12.9%	12.3%
Other	8.9%	8.6%	12.4%
Total	100.0%	100.0%	100.0%

similar. Among those willing to participate, 56.2 percent drove a car, 22.3 percent drove a sports-utility vehicle, and 12.9 percent drove a truck. Among the respondents, 56.8 percent traveled in a car, 18.5 percent traveled in a sports utility vehicle and 12.3 percent traveled in a truck.

Gender		
	% Male	% Female
Approached	75.6%	24.4%
Willing to Participate	75.3%	24.7%
Respondents	45.4%	54.6%

Gender. The most notable difference between visitors expressing willingness to participate and respondents was in gender. Among those indicating willingness to participate, 75.3 percent were male and 24.7 percent were female. Among the respondents, 45.4 percent were male and 54.6 percent were female.

One explanation for this discrepancy may be that National Park Service staff approached the vehicle driver and the drivers were primarily male. The respondent who completed the survey questionnaire may have been a female in the same travel party. No instructions were provided regarding who in the travel party should complete the survey questionnaire.

Residence. Travel parties were asked their home zip code or their country of residence if outside of the United States. If travel party members had more than one resident zip code, then the spokesperson's residence was recorded. Among those willing to par-

Residence			
	Willing to		
All	Participate	Respondents	
92.6%	92.7%	8.5%	
3.4%	3.4%	7.1%	
4.0	3.9%	3.4%	
100.0%	100.0%	100.0%	
	All 92.6% 3.4% 4.0	Willing to All Participate 92.6% 92.7% 3.4% 3.4% 4.0 3.9%	

ticipate, 92.7 percent were from the United States, 3.4 percent were from Canada, and 3.8 percent were from foreign countries.

Respondents include 89.5 percent from the United States, 7.1 percent from Canada and 3.4 percent from other foreign countries. Canadians were more likely to follow through and complete the survey than respondents from the United States. In fact all (96) Canadians indicating a willingness to participate returned a survey questionnaire.

The table compares the top ten states of residence for all travel parties approached, travel parties willing to participate, and respondents. The same top ten states appear on all three lists. There are minor differences in order after the first three states.

Most Frequent States of Origin United State Residents Only Willing to ΑII Participate Respondents Montana Montana Montana California California California Washington Washington Washington Oregon Minnesota Oregon Minnesota Minnesota Wisconsin Wisconsin Wisconsin Oregon Texas Texas Texas Michigan Michigan Michigan Pennsylvania Florida Florida